

**White Paper:** Developing *Diviner*, a digital platform

**Institution:** North Country Public Radio

**Project Directors:** Ellen Rocco and Amy Feiereisel

**Grant Program:** Digital Humanities Advancement Grant (DHAG), Level 2

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### **What was our project, and what did we build?**

In 2016 and 2017, North Country Public Radio (NCPR) developed an innovative digital platform for organizing and sharing humanities materials with the public for its North Country at Work project, a photo and oral history archive of work in Northern New York.

With our DHAG Level 2 Grant, we packaged the platform as DIVINER, and made it available to other humanities organizations as a WordPress-compatible theme [ncpr.github.io/diviner-wp-archive-theme/](https://ncpr.github.io/diviner-wp-archive-theme/) and in the WordPress directory as a plug-in [wordpress.org/plugins/diviner-archive/](https://wordpress.org/plugins/diviner-archive/) and compatible theme. We did not do this in the initial timeline we mapped out, but applied for a no-cost extension to finish our work.

### **Why was this worth building?**

When we were looking for a platform for our own project, we could not find a low-cost, attractive, user-friendly solution, so we built one. DIVINER is a tool to take a small humanities organization's content and transform it into an interactive archive, easily searchable by customizable meta-data.

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### **Project Activities** – *a summary of our project activities, divided into four sections.*

*November 2017 – May 2018*

The NCPR beta-version of *DIVINER*, the *North Country at Work website*, went live in October of 2017, a few weeks before the start of our grant period on November 1, 2017.

On November 7, 2017, the *DIVINER* team (5 members) hosted a full-day meeting with our Advisory Board (3 members) and Humanities Collaborators (8 members), which served as a review of the *DIVINER* Platform and a wide-ranging focus group of the institutions and projects *DIVINER* might serve when completed. The most productive documents to come out of this meeting were a list of new features

ranked by priority to the project, a list of “tweak” improvements needed for the platform as it stood, and a wish-list of future features.

Following the meeting, the DIVINER core staff (which includes Project Coordinator Amy Feiereisel, NCPR Manager Ellen Rocco, Digital Developer Graeme Hoffman, NCPR Digital Director Bill Haenel, and Digital Editor Dale Hobson) met extensively in November and December to process the results of the Nov. 7 meeting. We made a decision during that time period to prioritize on first building the underlying infrastructure of *DIVINER* before working on presentation and ‘bells and whistles’ type feature add-ons. We also finalized a product package of a WordPress Plug-In and related and optional Theme.

In January, February, and March the Project Coordinator and Digital Developer scoped out the rest of the grant period’s work plan in sprints, and wire-framed all the back-end WordPress controls, which were periodically reviewed by the rest of staff and Advisory Board). The Digital Developer started the process of re-engineering much of the NCAW code so that the platform could be made truly generic and configurable.

Designs were tentatively set in late April, and work on Sprint 1 of 4 development sprints began in late April. A task we had scheduled to begin in August of 2018, the documentation of the project, we started ahead of schedule, upon realizing it was easier and more thorough to develop user instructions at the same time we were making wire-frames and choosing how to structure back-end controls.

#### *June 2018 – December 2018*

In June, we were engaged in Sprint 2, our second development period for the back-end of DIVINER. We continued to build out the fields display and decided which fields to make available for customization.

During the month of July, we continued work on fields (specifically how to label them and activate or deactivate them at will) and user set-up of DIVINER 1.0, which we hoped to make as user-friendly as possible. We also consolidated our menu system into a single DIVINER Settings Area.

In August, we pivoted towards the front end, starting with the browse experience, which is the most unique and sophisticated piece of DIVINER. This involved back-end work to make fields show up on the browse page the way a user would wish them, as well as making them respond reactively to a user’s choices.

In September the Project Coordinator began to focus intensively on writing specific documentation, and the Digital Developer started work on the theme and user’s ability to customize it for their project (logo, colors, set-up of the landing page, images, etc.).

In October, we wrapped up work on back-end controls for the set-up experience, did a full drill-down on the browse page, and continued work on the theme. In early November, the entire core staff met to review the Digital Developer’s work so far, and were given access to a dummy site to use for testing.

**\*\*Because of our earlier prioritization of back-end development, we realized that the ‘bells and whistles’ we had hoped to incorporate (such as the addition of a mystery page and mapping component) were overly ambitious. Taking a more realistic approach, we decided DIVINER 1.0 would be a faithful (even enhanced) version of what we built for NCPR’s beta-project, with a stories section and improved collections experience, but without sporting some of our wish list additional features.**

November and December saw part of our team switch into testing and Q&A of different parts of DIVINER (specifically the browse experience and archive item controls), which involved setting up several test projects. We continued our work on our documentation process. The digital developer continued finished up the first full pass on the theme aesthetics.

#### *Requesting No-Cost Extension – December 2018*

In late November, the team reviewed our calendar for the rest of the grant period and realized that we still had to complete more theme development, two separate rounds of testing and subsequent tweak/fix periods, and writing our documentation. The documentation task proved difficult, as we were still working out the look and flow of the back-end and front-end as they related to each other. We were also looking at taking on this task over the Christmas and New Year holidays, effectively cutting our 8 available weeks down to 7. We decided to proceed with requesting a no-cost extension, because even though the project could be completed in the original time frame, we would also be forced to give up a certain standard of testing.

The grant period for Level II DHAG grants is eighteen months; we had requested fifteen. The Project Coordinator (Amy Feiereisel) decided to pursue applying for a no-cost extension, which we were granted in mid-December. The extension gave us until May 31, 2019 to reach our goals, though internally, we set the end of April as our target.

The additional time allowed the team to take the time needed to refine DIVINER’s interface.

#### *January 2019 – June 2019*

At the end of January we had our first completely integrated version of our theme, which we began testing and collecting feedback from project partners. Team members, station members, and volunteers contributed to testing; their feedback then had to be addressed, new versions of the theme released, and those new versions tested once again. This process was our area of focus in February and March. Because of the extension, we were able to spend a more time on creating customization options for the theme.

April saw our last development push, based on feedback we received from testing. This was followed by our last round of testing, which lasted into mid-May. During April and May we were also focused on finishing/updating our official documentation and installation guide for DIVINER. Part of the last round of testing was trying the theme outside its development environment, and in various WordPress supported hosting services (such as WP Engine).

We also reached out to our most prepared early adopters at this time (the Clinton County Historical Association and the Miner Institute) to let them know that DIVINER would soon be ready for their own installations.

At the end of May, we submitted the DIVINER theme to the WordPress Directory through North Country Public Radio's WordPress account, and made it available for download on [ncpr.github.io/diviner-wp-archive-theme/](https://ncpr.github.io/diviner-wp-archive-theme/).

We received feedback from WordPress fairly quickly that our theme contained too much to be submitted as a theme, and that much of its base functionality would better fit into WordPress's definition of a plug-in. It was (and is) important to us that we be compliant with WordPress standards and have DIVINER available on that platform, so while our release is perfectly usable and valid (and is in fact *being* used by our first two early adopters), we decided to split the functionality of the DIVINER theme into a WordPress Theme and WordPress Plug-in.

By the end of June we had our plug-in accepted by WordPress, and our theme is currently under review.

### ***Omissions and changes in project activities***

There were two major 'changes' we made within the grant period:

- 1) **We requested a no-cost extension of four additional months.** Our original period was scheduled for November 1, 2017 – Jan 31, 2019. In December, we asked to extend our grant period to May 31, 2019, and were granted that extension. We asked for the extension because we felt the final product would be much improved by more rounds of testing, and development had taken us longer than anticipated.
- 2) **We changed the 'format' in which DIVINER would be released a number of times.** In our original grant application, we stated we would release DIVINER as WordPress-compatible elements, planning to decide exactly what *configuration* of those elements we would produce during the grant period. At first we veered towards a bundle of elements (but realized this would be a hassle for users), then a plug-in (which limits aesthetic customization), and finally settled on an all-inclusive theme that could be downloaded and allow the user to get working almost immediately.

However, in the spring of 2019, we realized that to have DIVINER not only be WordPress compatible, but to also have it exist within the confines of the WordPress Repository (which means it has to be reviewed and approved by the WordPress team/community), we would need it to be a plug-in AND theme. Therefore our final products are a WordPress-compatible, downloadable theme, AS WELL AS a WordPress plug-in and theme (which can exist without one another, but work best in tandem). Developing these products did involve more work, but the team felt it was important to make DIVINER more widely available and also give institutions the ability to take advantage of the core functionality of DIVINER (the archive and browse

experience) without having to commit to the aesthetic styling choices we made. Additionally, the plug-in is ideal for organizations that already have a website.

There were no changes in key project personnel, and we followed our work plan fairly closely, though with the additional testing period.

***Briefly describe efforts made to publicize the results of the program.***

Since our project did not include public events or programming, we did not publicize the development of DIVINER to the public, though we used channels at NCPR to publicize the software to potential adopters, which is how we found a number of our interested parties.

In the coming months we plan to make a more concentrated effort to make the larger non-profit world aware of DIVINER as a tool, noting that we do not have additional dedicated funds for this purpose.

**Audiences**

***Describe audience – nature, size, geographic reach, sex, and age – assess impact the project had on this audience. What kinds of new or previously underserved audiences did the project attract?***

This project has two audiences – the audience for DIVINER as a digital tool, and the audience that experiences DIVINER without ever knowing about it.

**The first audience** is the staff and volunteers at small- to medium-sized humanities organizations (in the order of museums, historical associations, libraries, cultural heritage institutions, and public media organizations) that have amazing content (from photos to oral histories to videos to documents) they would like to share with the world in an accessible and public-friendly archive, but lack capacity to purchase software / web services needed to do so. So far we've impacted three organizations in the pursuit of this goal: North Country Public Radio, Clinton County Historical Association, and The Miner Institute.

**Our second audience** are the visitors to the three DIVINER websites listed above. Since October of 2017, the first beta-tester, North Country at Work, has had 22, 885 unique users, and 95, 303 total page views. The other two sites are months old and, therefore, we do not yet have data on their audience.

Our team is very excited about reaching a larger potential audience in the coming months and years for the organizations that use DIVINER as a tool.

***Was there in an increase in visitor flow or membership to your organization as a result of the project?***

No, though it certainly increased our social capital and standing within the regional non-profit community.

***Include a complete list of participants and appropriate statistical profiles that show impact of the project by geographical region, kind of institution, and level and type of participant.***

*Participants in the development of DIVINER:*

Jessica Becker, Wisconsin Humanities Council  
Shula Neuman, St. Louis Public Radio  
Bill Thomas, Prairie Public (North Dakota)  
Jill Breit, TAUNY (Traditional Arts of Upstate New York)  
Andrew Parrella, New Hampshire Public Radio  
Ivy Gocker, Adirondack Experience: The Museum on Blue Mountain Lake  
Gerald Zahabi, SUNY Albany  
Bryan Thompson, regional North Country Historian, De Kalb, NY  
Melissane Schrems, Historian and Professor of History: Saint Lawrence University, Canton, NY  
MJ Heisey, Professor of Potsdam: SUNY Potsdam, Potsdam, NY  
Eric Williams Bergen, Director of Digital Initiatives, St. Lawrence University Archives, Canton, NY  
Jack Brighton, Digital Consultant  
Mark Dzwonczyk, Tech Consultant

*Participants (early adopters):*

Helen Nerska and Roger Black, Clinton County Historical Association in Plattsburgh, NY  
Amy Beddard, William H. Miner Agricultural Research Institute, West Chazy, NY  
Jessica Becker, Wisconsin Humanities in Madison, Wisconsin  
Pete Benson, Saranac Free Library in Saranac Lake, NY

**Evaluation**

The project was not formally evaluated by an outside party. What follows is an internal assessment by our core team, Project Director Ellen Rocco, Project Coordinator Amy Feiereisel, Digital Developer Graeme Hoffman, NCPR's Digital Director Bill Haenel, and NCPR's Digital Editor Dale Hobson.

*Discuss both weaknesses and strengths of the program, how were problems dealt with?*

Strengths of the program were in collaboration between our principal team members and collaborating humanities and tech advisors, and in the strong teamwork exhibited by our principal team (Project Director Ellen Rocco, Project Coordinator Amy Feiereisel, Digital Developer Graeme Hoffman, Digital Editor Dale Hobson, and Digital Director Bill Haenel).

We met roughly once to twice a week, usually on Tuesdays and Fridays. Meetings usually consisted of a status update, discussion of recent issues or details that needed to be fleshed out, division of labor / work plan for the next week, and scheduling our next meeting. In this way, we were able to track our work and progress toward our goals. The Project Coordinator kept a log of notes from each meeting throughout the process.

While we found testing and Q&A to be challenging and more time-intensive process, we are proud of this work, particularly of the achievement of eliminating kinks, bugs, and user experience issues in a thorough manner. Hobson, Feiereisel, and Graeme did the majority of testing, with assistance from

other station members at North Country Public Radio – particularly Station Engineer Robert Sauter and Outreach Coordinator Claire Mendes.

Our major project weakness was likely our overly ambitious vision for the platform; the actual process was more involved and technically difficult than we had projected. This was not our digital developer's sole project, which meant it could not always be his sole focus. If we had additional funding, it would have been beneficial to add another developer to work Hoffman, especially one better versed in the regulations and submission process for the WordPress directory.

We occasionally struggled with workflow, especially when our Digital Developer was working remotely and we were trying to keep feedback flowing between team members. We addressed this by moving most correspondence from email to skype or call, thereby keeping ourselves in real time.

*How did the public respond to the project?*

There wasn't really a 'public' component of developing DIVINER, only public reception to DIVINER-supported archives. We are happy to report that we have received very positive feedback from the users of the North Country at Work site, which has been live since October of 2017.

### **Continuation of the Project**

#### ***Plans to continue project:***

North Country Public Radio and the North Country at Work team are committed to continuing development and adoption of DIVINER. Since May 31, 2019, our team has continued to work on improvements to the plug-in and theme and assist our early adopters. We plan to help two to four more early adopters establish their DIVINER archives this fall.

We applied for a Level III DHAG grant in June 2019, and hope to receive that funding, which would allow us to continue improving DIVINER, and disseminate it to more organizations in the non-profit realm.

#### ***What kind of new collaborative partnerships were formed between your institution and other organizations as a result of the project?***

We established many new relationships and partnerships as a result of this project. A number of humanities organizations came on board in advisory roles as we developed DIVINER, sharing their own insight and experiences to help us design a product that organizations would want to use. These included regional and national organizations, such as the Adirondack Experience: the Museum on Blue Mountain Lake, TAUNY (Traditional Arts of Upstate New York), Prairie Public Radio in North Dakota, St. Louis Public Radio, New Hampshire Public Radio, and Wisconsin Humanities. We also worked with local historians/professors from several New York universities.

Our early adopters are our strongest new partnerships – these include the Clinton County Historical Association, The Miner Institute, the Saranac Lake Free Library, and Humanities Wisconsin.

### **Long Term Impact**

***What kind of long-term impact will result from the project?***

Building DIVINER is all about long-term impact. We wanted to turn what had worked so well for our own project into something equally valuable (but low-cost and accessible) to other public media and humanities associations. DIVINER is already being used by two such organizations, and we hope it will be used by many more institutions that wish to share portions of their collections, stories, or content with the public in an interactive archive.

***How did the project affect the institution's ability to attract additional non- federal financial support?***

We had received regional support from the Cloudsplitter Foundation in the Adirondacks to kick-start building the North Country at Work website (DIVINER's first "beta-tester") in 2016. Because of the development we were able to achieve under the NEH DHAG grant, the Wyncote Foundation awarded us a grant of \$30,000 to help with additional costs.

***What effect did the project have on the public's perception of your institution AND on your plans for future projects?***

North Country Public Radio and the North Country at Work team are committed to continuing development and adoption of DIVINER for other institutions, and also plan to use it for our own future special projects. Building DIVINER and making it available to the non-profit world has directly improved our standing within our regional network of libraries, museums, and community organizations.

**Award Products**

The product of this award is DIVINER 1.0, a software package available for download at both [ncpr.github.io/diviner-wp-archive-theme/](https://ncpr.github.io/diviner-wp-archive-theme/) and in the WordPress directory as a plug-in [wordpress.org/plugins/diviner-archive/](https://wordpress.org/plugins/diviner-archive/) and compatible theme.

DIVINER 1.0 is open-source and completely free; it is built to be as user-friendly as possible – one need not have coding or website-building skills to set up and customize a DIVINER archive. Currently there are three 'installations' of DIVINER in use:

1. NCPR's North Country at Work project – this is what DIVINER was originally built for, our station's own photo and oral history project, North Country at Work, which collects stories and photographs of work from around the station's listening area. ([ncpr.org/work](https://ncpr.org/work))
2. The Miner Institute's Heart's Delight Farm (WMARI) photo archive - the Miner Institute is an active agricultural research and educational center with an on-premises archive of over 5,000 photos from the early 1900s of W.H. Miner's Heart's Delight Farm. WMARI's librarian, Amy Bedard, has been trying to determine how to share a portion of the archives with the public as well as create online collections that correspond with current physical exhibits. DIVINER meets both the logistical and financial needs of this institution.
3. The Clinton County Historical Association archives - The CCHA has 15,000 + images from the mid-1800s to the present, about one third of which are digitized. CCHA is the type of organization we originally imagined would use DIVINER – a small- to medium-sized humanities



organization with amazing content and dedicated staff, but a limited amount of financial resources.